

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/007099 A3**

(51) International Patent Classification<sup>7</sup>: **A01N 43/58, 43/50, A61K 31/495, 31/50, C07D 257/08, 257/12, 471/00, 487/00, 491/00, 495/00, 497/00**

(21) International Application Number:  
**PCT/US2004/021834**

(22) International Filing Date: **9 July 2004 (09.07.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
**60/486,339 10 July 2003 (10.07.2003) US**

(71) Applicant (*for all designated States except US*): **IM-CLONE SYSTEMS INCORPORATED [US/US]; 180 Varick Street, New York, NY 10014 (US).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KAWAKAMI, Joel [US/US]; 91 Morris Avenue, West Milford, NJ 07480 (US). DUNCTON, Matthew [GB/US]; 222 Montgomery Street, Jersey City, NJ 07302 (US). SHERMAN, Dan [US/US]; 35-25 78th Street, Jackson Heights, NY 11372 (US). HE, Hai-Ying [CN/US]; 3552 12th Avenue, Brooklyn, NY 11218 (US). KISELYOV, Alexander [UA/US]; 4203 Shorepointe Way, San Diego, CA 92130 (US). PYTOWSKI, Bronek [US/US]; 528 West 111th Street, New York, NY 10025 (US).**

(74) Agents: **SOMERVILLE, Deborah, A. et al.; Kenyon & Kenyon, One Broadway, New York, NY 10004 (US).**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:  
**14 April 2005**

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 2005/007099 A3

(54) Title: PKB INHIBITORS AS ANTI-TUMOR AGENTS

(57) Abstract: The invention is directed to biaryl compounds with two six membered rings fused wherein at least one six membered ring is substituted with a thiophenyl or furanyl ring. Useful in the inhibition of PKB kinase, the treatment of cancer, or the inhibition of tumor growth.